

## **ABSTRACT OF THE DISCLOSURE**

Disclosed is a multi-channel optical attenuator having a Planar Lightwave Circuit (PLC) structure for controlling a light path by waveguides and manufacturing method thereof. In this optical attenuator, a bonding medium layer of polymer is used to bond an actuator structure and a support structure. A silicon layer is provided with waveguides for transmitting optical signals from an optical signal transmission line and an activator formed at a predetermined portion thereof. The waveguides are inserted into cavities of the bonding medium layer. A support layer is attached to the bonding medium layer at an opposite face to a face where the bonding medium layer is bonded with a silicon substrate.